

**LITHIUM SECONDARY BATTERY**

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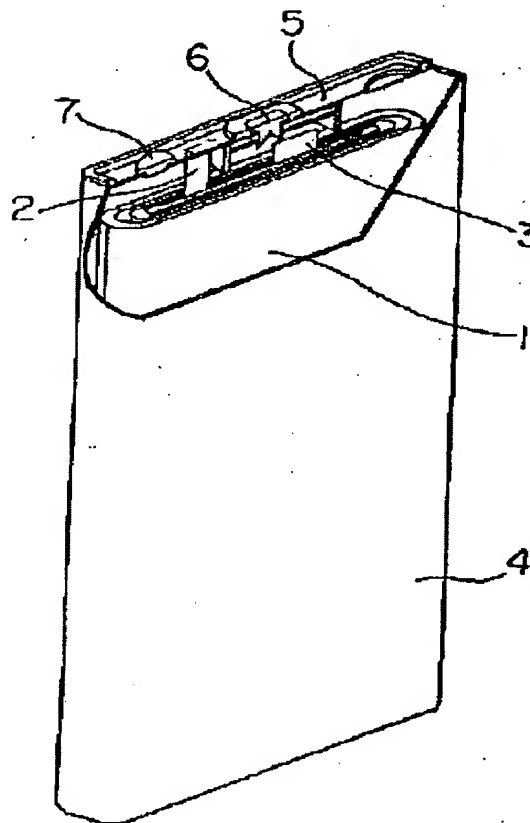
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**Abstract of JP2003142075**

**PROBLEM TO BE SOLVED:** To provide an inexpensive lithium secondary battery having high energy density and high safety without easily causing capacity deterioration even in storing the battery in a high-temperature atmosphere. **SOLUTION:** This lithium secondary battery is provided with a negative electrode comprising copper foil and a negative electrode mix layer formed on the copper foil and having a density of  $1.4\text{--}1.8\text{ g/cm}^3$ , a positive electrode comprising aluminum foil and a positive electrode mix layer formed on the aluminum foil and having a density of  $3.3\text{--}3.7\text{ g/cm}^3$ , and a nonaqueous electrolyte. The negative electrode mix layer comprises graphite and graphatization retarding carbon. The positive electrode mix layer is formed of at least one kind selected from among a group comprising an active material (a) comprising  $\text{LiMn}_2\text{O}_4$  and  $\text{LiNiO}_2$ , an active material (b) formed of  $\text{LiMn}_x\text{Ni}_{1-x}\text{O}_2$ , an active material (c) comprising  $\text{LiMn}_2\text{O}_4$ ,  $\text{LiNiO}_2$  and  $\text{LiCoO}_2$ , and an active material (d) formed of  $\text{LiMnyNizCo}_{1-y-z}$ .



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